TMO meeting

Tuesday 10/23/2001 – Wednesday 10/24/2001 Location – Metron Aviation, Reston, VA.

Attendees:

Mark Libby (ATCSCC)

Charles Bailey (ZNY)

Dan Bueno (ZBW)

Kapri Kupper (ZDC) - (Tuesday)

Jon Mintzer (ZID)

Mike Ogles (ZTL)

Doug Haney (ZOB)

Bill Leber (NWA)

Bill Cranor (USA)

Riley Shumberger (ASA)

Mark Huberdeau (Mitre)

Joe Hof – (ATCSCC) - (Wednesday)

Introduction:

Mark Libby opened the meeting and welcomed the participants. Mark Libby distributed a letter from Jack Kies, which introduces the 2002 Enroute Work Group. Mark Libby also distributed and reviewed the problem statement and objectives of the group.

Problem Statement: Existing technology and procedures to manage en route demand during periods of constraint are inefficient.

Objectives for 2002:

- Find the technology, procedures, processes, or combinations of these that will allow us to do differently in 2002 than in 2001.
- A primary objective among these is to replace using ground delay programs in support of SWAP.
- Develop universal situational awareness in all aspects of the process.

Bill Leber added they were looking to eliminate GDP in support of SWAP or anything to help reduce the use of. Bill Leber commented that the system

is "controlling flight's that do not need to be controlled" and missing flights that do. Mark Libby stated the purpose of the TMO meeting was to survey the participants and solicit their recommendations.

Mark Libby noted the 2002 Enroute Work Group's original goal was to have something available by April 1, but the group would consider implementations by June 1 or mid-summer and develop a long-term plan for 5- 10 years out. The last company visit planned by the team was identified as November 7th. The 2002 Enroute Work Group consist of Mark Libby, Mike Ogles, Bill Leber, and Riley Shumberger.

Topics and Participant comments Tuesday 10/23/01:

Bill Leber projected a NASA chart that outlines a concept the Enroute Work Group feels is a useful model.

Collaborative Stages for Congested Airspace TFM

- Preemptive User Action
- Collaboration on TFM restrictions
- TFM action

The chart displayed time intervals for each stage.

Mark Huberdeau projected weather scenarios from summer 2001 to aid in the discussions.

Mike Ogles identified two areas of concern:

- 1. Data issues
- 2. Impact (number of airplanes) complexity / share with users

Jon Mintzer –

- Is ETMS the only platform? What happens if there is a failure at the facility level?
- How will URET and the CCLD transition be affected?
- Bring the regional carriers into the process (RAA) assist the smaller carriers in getting connected with the process

Bill Leber –

- A good outcome of 2001 is that it appears the system is attempting to move airplanes instead of stopping airplanes.
- collaboration doesn't work with facility stand-alone tools;

- A tool in development, the congestion management tool (Joe Sherry, Mitre), will be demonstrated at the CR meeting on Thursday.
- Expand tactical collaboration
- Develop and use parallel routes westbound through Canadian

Riley Shumberger – the air carriers need to make the decisions on flying longer routes, carrying extra fuel, or canceling flight, etc

Kapri Kupper-

- What about multi–airport GDP's, fix load GDP's, multi-fix GDP's, How did these GDP updates slip?
- Prevent routes from shutting off control the flow of traffic allowing for flight deviations
- Re-define what type of TFM is needed in the New York area change the yellow CCFP areas to RED CCFP areas for New York

Charles Bailey-

- Use the open routes that are well clear of the weather proactively not wait and see
- Which traffic gets the priority?

Dan Bueno – running a single fix based GDP (for example GDM) would be helpful for ZBW

How does GDP in support of SWAP help the field facilities and what are the benefits?

This question was posed to the facility representatives with the following responses:

- Decreases the through-put in the en-route environment
- The terminals benefit from gridlock avoidance (terminals end up becoming the issue)
- For ZOB it is an en-route flow problem − so GDP's reduce the flow
- For ZID it is an en-route issue the problem backs up to ZID
- For ZNY it is a departure route restriction problem need to control the system to get departures out.

ZOB- would like to see GDP for a sector ZID- need to give the controller the ability to manage the traffic ZDC- Implement DSP Bill Leber summarized a possible plan, based on what he heard as:

- 1. Reduce the ZNY departures restrictions
- 2. Use the playbook early (wait and see is not working)
- 3. Have more meaningful reviews

Other items mentioned:

- Middle ground routing philosophy NRP routing vs. a full transcon playbook route
- Integrated training (airlines and FAA) for tools and procedures
- Each ARTCC has certain hotspots that need to be addressed
- Traffic priority and equity issues –

Equal access to airspace is defined as?

What is the definition of equity?

- Implement a route status display
- Use CIWS for route planning
- Limited airborne holding backs up the en-route environment
- Formulate and increase the use of exit strategies
- Less use of phone calls to the ATCSCC if the information is available using other sources
- Resources continue to be an issue manpower needed to staff the SPO telcons and do the tactical work also.
- Define the trigger mechanisms and document it in the plan

TFM applications of complexity metrics:

Dr. Terry Thompson, Metron Aviation, briefed the group on the research being conducted regarding TFM applications of complexity metrics.

Participant comments Wednesday 10/24/01:

Wednesday's discussion focused on improving departures from New York, ZBW, and PHL including expanding the playbook for westbound departures.

Bill Leber –

- Convene a small workgroup to develop a Northeast meso-scale strategy (ie playbook)
- complexity issues are too hard for the severe weather unit at the ATCSCC. (for example variables include latitude, longitude, vertical, time of day, duration, speed of movement area, speed of movement cells, coverage, demand)
- Need to integrate tools too many tools between airlines and FAA

- reroute the ZNY departures early, be proactive (reroute early and often)
- Reducing departure restrictions will reduce GDP in support of SWAP because the approaching gridlock problem will be reduced

Charlie Bailey

- Document the impact of the play, what does it take to set up the play i.e. the resultant dependencies.
- need to eliminate the process delays, build scenario's for the Northeast quadrant
- (concept) develop a tool with drop down widows on the TSD, one side has planned plays and the other side has plays in use.
- proper planning is needed even some hard decisions (for example shut off ZBW)
- ZNY currently runs parallel routes with J80 no directs cut departure capacity in half; normally J80 is a dual route.
- more can be done in departure planning (current playbook core routes are to fuzzy to use need refining)

Riley Shaumburger – need a playbook system identifying all the impacts when a play is implemented – should be included in the book

Bill Cranor – change the playbook process – use a preplan template

Joe Hoff –

- we do good for arrivals, but need a better template for departures.
- need flexibility in the system
- turn points create problems with departures and arrivals

Doug Haney –

- does this mean we change the current SPT process?
- departure routes need to be set up early and have the airlines file the routes
- Planning different routes are ok, but there is a trade off when ZOB starts getting other traffic from the south, traffic that is not normally seen

Jon Mintzer -ROD is a key point for ZID when weather hits

Mark Libby - Use Fixes and FCA's for Ground Stops

Other items mentioned:

- The Playbook process should be on going with continual evaluation and feedback.
- Expand the use Canadian airspace for westbound traffic
- Possible Multi-airport, multi-fix, distance based program for the fall 2002

Conclusion:

The meeting concluded at noon on Wednesday. Bill Cranor noted that the report from the 2002 Enroute Work Group would be delivered to the S2K+1 steering committee on Tuesday, November 13.

Notes submitted by Mark Huberdeau – November 6, 2001 <u>Mwhuber@mitre.org</u> 703 883 5906